October 2, 2017

BY ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: ***Spectrum Bands Above 24 GHz et. al.*****, GN Docket No. 14-177, IB Docket No. 15-256, WT Docket No. 10-112, and IB Docket No. 97-95**

Dear Ms. Dortch:

On September 28, 2017, EchoStar Satellite Operating Corporation and Hughes Network Systems, LLC, (collectively "EchoStar"); Inmarsat, Inc. ("Inmarsat"); Intelsat Corporation ("Intelsat"); SES Americom, Inc. ("SES"), O3b Limited ("O3b"), and WorldVu Satellites Ltd. d/b/a OneWeb ("OneWeb") (collectively, the "Satellite Broadband Companies") met with staff of the International Bureau, the Office of Engineering and Technology, and the Wireless Telecommunications Bureau regarding pending petitions for reconsideration and the pending further notice of proposed rulemaking in the above-referenced proceeding.

EchoStar was represented by Brennan Price, Senior Principal Engineer, Regulatory Affairs, and outside counsel William Wiltshire of Harris, Wiltshire, & Grannis LLP. Inmarsat was represented by Giselle Creeser, Director, Regulatory. Intelsat was represented by Alexander Gerdenitsch. Manager, Spectrum Policy, Americas. O3b was represented by Noah Cherry, Regulatory Counsel. SES was represented by Philippe Secher, Senior Manager, Spectrum Management and Development. OneWeb was represented by Mariah Shuman, Senior Director of Regulatory Affairs.

International Bureau staff present were Jose Albuquerque, Chip Fleming, Jennifer Gilsenan, Jim Schlichting, and Tom Sullivan. Office of Engineering Technology staff present were Bahman Badipour, Michael Ha, Julius Knapp, Nicholas Oros, Jamison Prime, and Ronald Repasi. Wireless Telecommunications Bureau staff present were Simon Banyai, Stephen Buenzow, Tiare Faatea, Tim Hilfiger, Charles Oliver, John Schauble, Blaise Scinto, Dana Shaffer, Don Stockdale, Joel Taubenblatt, Jeffrey Tignor, Janet Young, and Nancy Zaczek.

In the meeting the parties discussed the attached talking points, which were provided to participants, setting out the Satellite Broadband Companies' recommendations to facilitate intensive and equitable use of 5G platforms in the Fixed Satellite Service (FSS) and Upper Microwave Flexible Use Service (UMFUS), ensuring both services have sufficient access to the scarce spectrum resources they need to meet U.S. consumer demands. Further, the Satellite Broadband Companies discussed their current and planned future operations in the bands above 24 GHz, which will provide broadband and 5G services to communities across the United States, including unserved and underserved communities. These include the continued deployment of advanced satellite services across the United States, enabling better access to broadband services to U.S. consumers, wherever they are located.

During the meeting, staff sought clarification of the Satellite Broadband Companies' position on collocation of satellite earth stations in certain bands. In a June 10, 2016, letter, some of the Satellite Broadband Companies and other parties stated that "forcing [satellite operators] to use the same facility could compromise competitively sensitive information about network technology or operating procedures."[1] However, the Satellite Broadband Companies want to clarify that this may not always be the case. The Satellite Broadband Companies can envision situations in which colocation of earth stations may be feasible without implicating competitive concerns, something that occurs today. It is important that satellite operators be afforded flexibility in network deployments to ensure they can meet the demands of their customers. The Satellite Broadband Companies support policies that enable flexibility in deploying satellite infrastructure, just as the Commission is enabling for the terrestrial wireless industry.

Pursuant to the Commission's rules, this notice is being filed in the above-referenced dockets for inclusion in the public record. Please contact me should you have any questions.

Respectfully submitted,

/s/ Brennan T. Price

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[1] Ex Parte letter from EchoStar Satellite Operating Corporation; Hughes Network Systems, LLC; Inmarsat, Inc.; Lockheed Martin Corporation; O3b Limited; SES Americom, Inc.; ViaSat, Inc.; and WorldVu Satellites Ltd. d/b/a OneWeb, filed in Docket GN-14-177, June 10, 2016, at 3.

Cc:

Jose Albuquerque	Jamison Prime
Bahman Badipour	Ronald Repasi
Simon Banyai	John Schauble
Stephen Buenzow	Jim Schlichting
Tiare Faatea	Blaise Scinto
Chip Fleming	Dana Shaffer
Jennifer Gilsenan	Don Stockdale
Michael Ha	Tom Sullivan
Tim Hilfiger	Joel Taubenblatt
Julius Knapp	Jeffrey Tignor
Charles Oliver	Janet Young
Nicholas Oros	Nancy Zaczek

Attachment

THE SATELLITE BROADBAND COMPANIES PROPOSE RULES TO PERMIT EQUITABLE USE OF HIGH-BAND SPECTRUM BY FIXED SATELLITE SERVICE OPERATORS AND UMFUS LICENSEES

The Satellite Broadband Companies propose rules for deployment of Fixed Satellite Service (FSS) earth stations in certain bands above 24 GHz designed to facilitate intensive and equitable use by 5G platforms in the FSS and the Upper Microwave Flexible Use Service (UMFUS), ensuring both services have sufficient access to the scarce spectrum resources they need to meet the ever-growing demands of U.S. consumers.

On Reconsideration:

- In order to ensure the most efficient use of spectrum, the FCC should revise the conditions recently adopted for deployment of FSS earth stations in the 27.5-28.35 GHz (28 GHz) and 37.5-40.0 GHz (39 GHz) bands as follows:

    1. ***Adopt a revised population coverage limit for FSS earth stations in the 28 and 39 GHz bands.*** The current rule limits FSS earth stations to aggregate coverage of 0.1% of population in a UMFUS license area. This may have the effect of driving earth station deployment in more populated areas, because (a) locations in low population counties that have sufficient fiber, utility, and accessibility support for an earth station tend to be near population centers, and (b) it is much easier to conform to the 0.1% population criteria just outside urban centers of highly populated license areas than anywhere in low population license areas. By adopting an 0.2% population coverage limit in the most densely populated license areas, a fixed population limit in low and medium density license areas, and a 10% (for 28 GHz) or 5% (for 39 GHz) population coverage limit in the most sparsely populated license areas, the FCC would create a framework that encourages FSS operators to site their earth stations in areas that are likely to be of lower value to UMFUS operators.

    2. ***Better define the transient population limits.*** The current rule restricts FSS earth station deployment near areas where people gather on a transient basis. However, the rule does not define the relevant terms, which undermines regulatory certainty, could severely restrict FSS deployment, and also lead to absurd results. If such limits are to be retained, the relevant terms should be defined as follows:

        a. "Major event venue" should be defined as one with a capacity of 10,000 or more. This would cover all NFL/MLB/NBA/NHL venues, and major college venues as well.
        b. "Arterial street, interstate or U.S. highway" should include only principal arterials as defined by the Department of Transportation's classification system.
        c. "Passenger railroad" should be defined as railroad track used by Amtrak, which covers over 21,000 miles of track.

d. "Cruise ship port" should apply to the fifteen largest ports in the United States, which handle almost 90% of all cruise ship passenger departures in North America.

In addition, "urban mass transit route" should be eliminated as duplicative, as such routes typically follow principal arterial roads, share track with Amtrak, or serve highly populated areas.

3. ***Eliminate the rules limiting FSS operators to three earth stations in any given county (for 28 GHz) or Partial Economic Area (for 39 GHz).*** These rules prevent FSS operators from locating multiple earth station facilities in areas with little or no impact on UMFUS.

4. ***Apply the 70/80/90 GHz Band Database Approach to UMFUS Facilities.*** This would provide a streamlined way for FSS operators to identify areas of minimal UMFUS deployment for use by earth stations, while obviating the need for UMFUS operators to respond to numerous requests for coordination.

Further Notice:

- In order to meet the requirements of both UMFUS licensees and FSS operators in V-band spectrum and ensure that this valuable resource is used efficiently and equitably, the Satellite Broadband Companies propose that the Commission should:

1. ***Reserve the 48.2-50.2 GHz band as exclusive for FSS.*** The FCC has designated this band segment exclusively for FSS uplinks. In making that designation, the FCC found that "spectrum designated exclusively for FSS will ultimately permit more effective deployment of satellite systems than does the current shared allocation scheme." It reaffirmed this finding when identifying corresponding downlink spectrum. This is one of the few slices of spectrum in which satellite operators can deploy user terminals on a widespread basis with full protection against interference from other services.

2. ***Give FSS greater and more equitable access to the 47.2-48.2, 50.4-51.4 and 51.4-52.4 GHz bands.*** Given the propagation characteristics of this spectrum, the FCC should reconsider the proposals it has put forward and allow both UMFUS and FSS operators to deploy meaningfully in these greenfield bands. FSS operators have clearly demonstrated an interest in these bands for both GSO and NGSO operations. The satellite industry has not yet developed a consensus on how the FCC should proceed because different operators have identified the bands for different applications. However, the industry has been unanimous in demonstrating viable commercial interests in the 47 GHz and 50 GHz bands and the Commission should strive to find a licensing scheme that accommodates those planned FSS operations.

This package of proposals strikes a fair and efficient balance between the needs of FSS and UMFUS operators in this high-band spectrum and will enable the deployment of both services to meet user demands across the United States. The Satellite Broadband Companies urge the

Commission to implement this approach in order to facilitate rapid development of both satellite and terrestrial broadband systems capable of providing advanced communications services to Americans no matter where they live, helping to close the digital divide and to increase competition for 5G and other advanced communications services.